

Claims

- [c1] 1. A method of controlling the movement of a moveable partition having at least a pair of transversely spaced, ground engaging drive elements for moving the partition along a parallel path, said method comprising the steps of sensing the path of movement of the partition and controlling the drive elements to maintain a parallel path of movement.
- [c2] 2. A method as set forth in claim 1 wherein the drive elements are driven at the same rate as long as the path of movement is parallel.
- [c3] 3. A method as set forth in claim 2 wherein the drive elements are driven at the same rate as long as the path of movement does not deviate from parallel by more than a predetermined amount.
- [c4] 4. A method as set forth in claim 3 wherein the drive elements are driven at a different rate only if the path of movement deviates from parallel by more than the predetermined amount.
- [c5] 5. A method as set forth in claim 2 wherein a detector is provided to determine if an undesired object is in the

path of the partition and separately controlling the drive elements in response to an apparent detection to shift the partition to see if the detection was an error caused by the orientation of the partition and if the condition still exists after a predetermined correction the movement of the partition is halted.

[c6] 6.A method of controlling the movement of a moveable partition having at least a pair of transversely spaced, ground engaging drive elements for moving the partition along a parallel path, said method comprising the steps of sensing optically when an object moves into the path of movement of the partition and separately controlling the drive elements in response to an apparent detection to shift the partition to see if the detection was an error caused by the orientation of the partition and if the condition still exists after a predetermined correction the movement of the partition is halted.

[c7] 7. A moveable partition having at least a pair of transversely spaced, ground engaging drive elements for moving said partition along a parallel path, a sensor for sensing the path of movement of the partition and a control responsive to the output of said sensor to differently operate said drive elements to maintain a parallel path of movement.

- [c8] 8. A moveable partition as set forth in claim 7 wherein the sensor comprises an optical sensor cooperating with a path guide fixed relative to the partition.
- [c9] 9. A moveable partition as set forth in claim 7 wherein the sensor senses the amount of deviation from the parallel path and only operates the drive elements separately if the deviation is greater than a predetermined amount.
- [c10] 10. A moveable partition as set forth in claim 7 wherein an optical sensor provides an indication that an undesired object is in the path of the partition and stops the drive elements if an object is detected.
- [c11] 11. A moveable partition as set forth in claim 10 where the control first operates the drive elements differently and if that does not stop the detection the drive elements are stopped.
- [c12] 12. A moveable partition as set forth in claim 7 wherein the sensor is a mechanically actuated position sensor and provides a signal indicative of the actual position and only operates the drive elements separately if the deviation is greater than a predetermined amount.
- [c13] 13. A moveable partition as set forth in claim 1 wherein the partition is supported on a floor and an overhead

safety hanger is provided that does not support the partition or interfere with its operation unless the partition becomes unbalanced and may fall.

[c14] 14. A moveable partition as set forth in claim 13 wherein the sensor is a mechanically actuated position sensor and provides a signal indicative of the actual position and only operates the drive elements separately if the deviation is greater than a predetermined amount.

[c15] 15. A moveable partition as set forth in claim 14 wherein the mechanically actuated sensor has an element engaged with the safety hanger.

[c16] 16. A moveable partition as set forth in claim 15 wherein the mechanically actuated sensor senses the actual position relative to the safety hanger.

[c17] 17. A moveable partition as set forth in claim 16 wherein there are a pair of safety hangers and there is a mechanically actuated sensor associated with each safety hanger.

[c18] 18. A moveable partition as set forth in claim 17 wherein the drive elements are driven at the same rate as long as the path of movement does not deviate from parallel by more than a predetermined amount.

- [c19] 19. A moveable partition as set forth in claim 17 wherein the drive elements are driven at a different rate only if the path of movement deviates from parallel by more than the predetermined amount.
- [c20] 20. A moveable partition as set forth in claim 7 wherein there sensor comprises at least a pair of spaced optical sensors.
- [c21] 21. A moveable partition as set forth in claim 20 wherein the pair of optical sensors are spaced along the width of the partition.
- [c22] 22. A moveable partition as set forth in claim 20 wherein the pair of optical sensors are spaced along the partition in its direction of travel.